

TRANSMITTAL LETTER TO THE UNITED STATES
DESIGNATED/ELECTED OFFICE (DO/EO/US)
CONCERNING A FILING UNDER 35.U.S.C. 371

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U.S. APPLICATION NO

09/720691

INTERNATIONAL APPLICATION NO PCT/AU99/00681
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INTERNATIONAL FILING DATE 24 AUGUST 1999

PRIORITY DATE CLAIMED 24 SEPTEMBER 1998
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TITLE OF INVENTION

A LABEL

APPLICANT(S) FOR DO/EO/US
Leonard James Scott

Applicant herewith submits to the United States Designated /Elected Office (DO/EO/US) the following items and other information:

1. This is a FIRST submission of items concerning a filing under 35 U.S.C. 371.
2. This is a SECOND or SUBSEQUENT submission of items concerning a filing under 35 U.S.C. 371.
3. This express request to begin national examination procedures (35 U.S.C. 371(f)) at any time rather than delay examination until the expiration of the applicable time limit set in 35 U.S.C. 371(b) and PCT Articles 22 and 39(I).
4. A proper Demand for International Preliminary Examination was made by the 19th month from the earliest claimed priority date.
5. A copy of the International Application as filed (35 U.S.C. 371(c)(2))
 - a. is transmitted herewith (required only if not transmitted by the International Bureau).
 - b. has been transmitted by the International Bureau.
 - c. is not required, as the application was filed in the United States Receiving Office (RO/US).
6. A translation of the International Application into English (35 U.S.C. 371(c)(2)).
7. Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))
 - a. are transmitted herewith (required only if not transmitted by the International Bureau).
 - b. have been transmitted by the International Bureau
 - c. have not been made; however, the time limit for making such amendments has NOT expired.
 - d. have not been made and will not be made.
8. A translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).
9. An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).
10. A translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).

Items 11. to 16. below concern other document(s) or information included:

11. An Information Disclosure Statement under 37 CFR 1.97 and 1.98.
12. An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
13. A FIRST preliminary amendment.
 - A SECOND or SUBSEQUENT preliminary amendment.
14. A substitute specification.
15. A change of power of attorney and/or address letter.
16. Other items or information:

Verified Statement Claiming Small Entity Status

First Page of WO 00/19395

9 pages of specs, 3 pages claims, 5 sheets drawings

PCT Request

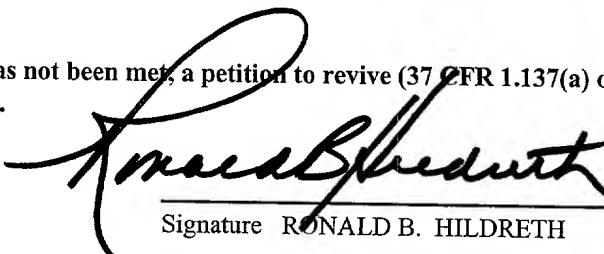
International Search Report

International Prelim. Exam

PCT/IPEA/402

PCT/IPEA/401

PCT/IB/308

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17. [X] The following fees are submitted:		<u>CALCULATIONS PTO USE ONLY</u>																																																																			
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<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Claims</th> <th style="text-align: center;">Number Filed</th> <th style="text-align: center;">Number Extra</th> <th style="text-align: center;">Rate</th> <th style="text-align: center;">\$</th> </tr> </thead> <tbody> <tr> <td>Total Claims</td> <td>28 -20=</td> <td>8</td> <td>X \$ 18.00</td> <td>\$ 144.00</td> </tr> <tr> <td>Independent Claims</td> <td>2 -3=</td> <td></td> <td>X \$ 80.00</td> <td>\$ </td> </tr> <tr> <td colspan="3">Multiple dependent claim(s) (if applicable)</td> <td>+ \$270.00</td> <td>\$ 270.00</td> </tr> <tr> <td colspan="4" style="text-align: center;">TOTAL OF ABOVE CALCULATIONS =</td> <td>\$ 1,414.00</td> </tr> <tr> <td colspan="4"> Reduction by 1/2 for filing by small entity, if applicable. Verified Small Entity statement must also be filed. (Note 37 CFR 1.9, 1.27, 1.28). \$ </td> <td>\$ 707.00</td> </tr> <tr> <td colspan="4" style="text-align: center;">SUBTOTAL =</td> <td>\$ 707.00</td> </tr> <tr> <td colspan="4"> Processing fee of \$130.00 for furnishing the English translation later than [] 20 [] 30 months from the earliest claimed priority date (37 CFR 1.492(f)). + \$ </td> <td>\$ </td> </tr> <tr> <td colspan="4" style="text-align: center;">TOTAL NATIONAL FEE =</td> <td>\$ 707.00</td> </tr> <tr> <td colspan="4"> Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property + \$ </td> <td>\$ </td> </tr> <tr> <td colspan="4" style="text-align: center;">TOTAL FEES ENCLOSED =</td> <td>\$ 707.00</td> </tr> <tr> <td colspan="4"></td> <td style="text-align: center;">Amt. refunded \$</td> </tr> <tr> <td colspan="4"></td> <td style="text-align: center;">charged \$</td> </tr> </tbody></table>					Claims	Number Filed	Number Extra	Rate	\$	Total Claims	28 -20=	8	X \$ 18.00	\$ 144.00	Independent Claims	2 -3=		X \$ 80.00	\$	Multiple dependent claim(s) (if applicable)			+ \$270.00	\$ 270.00	TOTAL OF ABOVE CALCULATIONS =				\$ 1,414.00	Reduction by 1/2 for filing by small entity, if applicable. Verified Small Entity statement must also be filed. (Note 37 CFR 1.9, 1.27, 1.28). \$				\$ 707.00	SUBTOTAL =				\$ 707.00	Processing fee of \$130.00 for furnishing the English translation later than [] 20 [] 30 months from the earliest claimed priority date (37 CFR 1.492(f)). + \$				\$	TOTAL NATIONAL FEE =				\$ 707.00	Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property + \$				\$	TOTAL FEES ENCLOSED =				\$ 707.00					Amt. refunded \$					charged \$
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SEND ALL CORRESPONDENCE TO: BAKER BOTTS L.L.P. 30 Rockefeller Plaza New York, New York 10112-4498																																																																					
 Signature RONALD B. HILDRETH December 28, 2000 Date 19,598 Registration No.																																																																					

Applicant or Patentee: _____ Attorney's _____
Serial or Patent No.: _____ Docket No.: *A 33-2315 T-1*
Filed or Issued: _____
For: _____

VERIFIED STATEMENT (DECLARATION) CLAIMING SMALL ENTITY
STATUS (37 CFR 1.9 (f) and 1.27 (b)) — INDEPENDENT INVENTOR

As a below named inventor, I hereby declare that I qualify as an independent inventor as defined in 37 CFR 1.9 (c) for purposes of paying reduced fees under section 41 (a) and (b) of Title 35, United States Code, to the Patent and Trademark Office with regard to the invention entitled A LABEL described in

International Patent Application No PCT/AU99/00681 filed 24 August 1999
[] the specification filed herewith
[] application serial no. _____, filed _____
[] patent no. _____, issued _____

I have not assigned, granted, conveyed or licensed and am under no obligation under contract or law to assign, grant, convey or license, any rights in the invention to any person who could not be classified as an independent inventor under 37 CFR 1.9 (c) if that person had made the invention, or to any concern which would not qualify as a small business concern under 37 CFR 1.9 (d) or a nonprofit organization under 37 CFR 1.9 (e).

Each person, concern or organization to which I have assigned, granted, conveyed, or licensed or am under an obligation under contract or law to assign, grant, convey, or license any rights in the invention is listed below:

[] no such person, concern, or organization
[] persons, concerns or organizations listed below*

*NOTE: Separate verified statements are required from each named person, concern or organization having rights to the invention averring to their status as small entities. (37 CFR 1.27)

FULL NAME _____
ADDRESS _____
[] INDIVIDUAL [] SMALL BUSINESS CONCERN [] NONPROFIT ORGANIZATION

FULL NAME _____
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[] INDIVIDUAL [] SMALL BUSINESS CONCERN [] NONPROFIT ORGANIZATION

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I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 CFR 1.28 (b))

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this verified statement is directed.

SCOTT Leonard James

NAME OF INVENTOR

NAME OF INVENTOR

NAME OF INVENTOR

X LEN SCOTT

Signature of Inventor

Signature of Inventor

Signature of Inventor

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Date *21.12.2000*

Date

Date

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WO 00/19395

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A LABEL

Field of the Invention

5 The present invention relates to the field of labels, particularly labels with removable promotional or advertising material.

Background of the Invention

10 The broad concept of providing labels with removable adhesive stickers is known. For example, International Patent Application No. PCT/US97/18837 discloses a label with an adhesive sticker arranged on an inside face of the label. Such a label is, however, known to be formed of a simple double layer construction of conventional laminated paper or polypropylene material which is considered to be cost effective and sufficiently robust for use
15 with tinned produce or the like. There has not to the applicant's knowledge been any suitable application of such a label to the soft drink industry where material thickness and reliable application of the label is of paramount concern.

20 The object of the present invention is to provide a label construction which is particularly, but not exclusively, suitable for use in a commercial bottle labelling installation and more specifically it is an object to provide a label which is readily adapted to be cut and wrapped about a bottle for proper application during bottle manipulation.

Summary of the Invention

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In accordance with the invention, there is provided a composite label including a first layer of printed polyester for displaying information at a first major surface of the label and a second layer including material having a density less than the polyester for presenting information at a second major surface of the label, the second layer including a removable portion arranged to be separated from the label and secured to another object.

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Polyester has previously been used as a clear laminate for labels but has not, to the Applicant's knowledge, ever been used as an information carrying surface in a composite label. The invention preferably uses a white polyester which is chemically treated for penetration and acceptance of ink. Preferably, the material of the second layer comprises 5 polypropylene. The polyester provides a number of advantages due to its comparative density relative to the polypropylene. For example the depth dimension of the label may be minimised whilst a suitable degree of strength is maintained in the label and the polypropylene may be readily cut or scored due to its relative softness, so as to define the removable portion, without compromising the integrity of the polyester layer.

10

Preferably, the second layer includes an adhesive on one side thereof for securing the removable portion to the first layer and the first layer includes a release coating to facilitate removal of the portion therefrom, the adhesive and release coating providing a release strength factor of between 17 grams force/50mm and 30 grams force/50mm.

15

Such a release strength factor represents the result of a considerable amount of research into application of a composite label to the bottling industry. The release strength factor prevents accidental "fly-offs" or separation of the first and second layers during high speed labelling, whilst still allowing a user to peel off the removable portion with relative ease.

20

Accordingly, another broad aspect of the invention relates to the release strength factor and provides a composite label including a first layer for displaying information at a first major surface of the label and a second layer including a removable portion arranged to be separated from the label and secured to another object, wherein the second layer includes an adhesive 25 on one side thereof for securing the removable portion to the first layer and the first layer includes a release coating to facilitate removal of the portion therefrom, the adhesive and release coating providing a release strength factor of between 17 grams force/50mm and 30 grams force/50mm.

30 The first and second layers may then be formed as described above but, alternatively, the second layer may instead be printed with information for display to both sides thereof and the

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first layer may be transparent such that the information printed on the second layer is viewable from the first major surface of the label.

In that regard, the second layer may also be a transparent material, such as clear 5 polypropylene, with a plurality of overlaid print layers applied thereto comprising a first image printed on the transparent material, for display toward the first major surface, a masking layer and a second image facing outwardly of the second major surface.

Preferably, the release coating is formed of a silicon material.

10

Preferably, a clear polypropylene laminate is applied on the first major surface. Preferably a varnish is applied to the second major surface with a coefficient of friction in the range of about 0.25 to 0.40.

15

Preferably, a depth dimension of the first layer is in the range of about 12 micron to 36 micron. Preferably, the second layer has a depth dimension in the range of about 23 micron to 36 micron.

20

Preferably, the second layer includes a mark for detection by an electronic eye to facilitate actuation of a cutting device, for scoring the second layer so as to define the removable portion. Preferably the portion is in the form of a sticker.

25

Preferably, the label is for use with a bottle and includes an aggressive adhesive applied to the second major surface in a region adjacent the removable portion, to facilitate secure attachment of the label to the bottle.

Brief Description of the Drawings

The invention is more fully described, by way of non-limiting example only, with reference 30 to the accompanying drawings, in which:

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Figure 1 is a perspective view of a label in accordance with the invention;
Figure 2 is a perspective view of a bottle with the label affixed thereto;
Figure 3 is a perspective view of the bottle of Figure 2 with the label partially removed;
Figure 4 is a schematic flow chart illustrating the manufacturing steps for producing the label;
5 Figure 5a is a diagrammatic plan view of the label of the invention;
Figure 5b is a diagrammatic exploded cross-section view of the label of Figure 5a;
Figure 6 is a diagrammatic cross-sectional view of a score line being formed in the label; and
Figure 7 is a diagrammatic cross-section view, similar to that shown in Figure 5b, illustrating
an alternative label construction.

10

Detailed Description of Preferred Embodiments

The label 1 includes a first major surface 2 which is arranged to present information such as, for example, a trade mark or advertising material, and a second major surface 3. The first 15 major surface is formed by a first layer 5 of printed polyester, which is preferably coated with a clear polypropylene laminate 6 and the second major surface 3 is formed by a second layer 7 of polypropylene. The second layer 7 is divided into a removable portion 8, such as a sticker 9, and a tab 10 which comprises part of fastening means 11 for securing the label to an object such as a bottle 12, as shown in Figure 2.

20

The label 1 is affixed to the bottle 12 by securing the fastening means 11 to the bottle with a suitable first aggressive adhesive 13. A second aggressive adhesive 14 may then be applied such that a second end 15 of the label may be wrapped around the bottle 12 and securely attached to a first end 16 of the label 1.

25

The second end 15 of the label 1 may then be freed by gripping the second end and peeling it away from the first end 16. The label may then be unwound from the bottle and the sticker 9 removed in the manner shown in Figure 3. The fastening means ensures that the label 1 remains attached to the bottle 12.

30

As can be appreciated from the above, the invention provides a means of utilising a second

- 5 -

major surface of a label by attaching a removable sticker thereto. Further, removal of the sticker may be achieved without removing the rest of the label from the bottle so as to inhibit littering which may otherwise result if the label disengages from the bottle.

5 The construction of the label is more fully described with reference to Figure 4.

The first layer 5 is produced by firstly forming a suitable polyester at step 20. The polyester is preferably a white polyester produced by combining PET (polyethylyne terephthalate) material with titaniumdioxide. The material is then chemically treated at step 21 for 10 acceptance and penetration of ink, using a suitable combination of methylmethacrylate, butylacrylate, melamine resin and acrylic binder. Conventional plasma/Corona treatment was found not to provide adequate ink acceptance, with the result of deterioration and ink delamination from the polyester.

15 A release coating is applied at 22 on a side of the first layer which is to face the removable portion of the second layer. The release coating is preferably applied by way of a solvent based silicon treatment or a UV based coated silicon treatment in order to render the first layer with a silicon coating in the order of 0.5 to 3.0 grams/m², to provide a tight release of between 17 grams force/50mm and 30 grams force/50mm. Such a release strength factor 20 achieves a significant advantage in that inadvertent release of the second layer from the first layer during labelling is prevented whilst still allowing the sticker portion 8 to be relatively easily removed by a purchaser of the bottle.

The second layer 7 is produced simultaneously with the first layer 5 and is formed of a 25 material of less density than the first layer. The material is preferably polypropylene material which is formed at step 23, preferably as a white or opaque Biaxially Orientated Polypropylene (BOPP) which is then subjecting to a conventional Corona treatment 24 in order to lift a Dyne level of the material to within the range 33 to 73 for enhanced print adhesion.

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The adhesive is preferably an acrylic emulsion adhesive or a solvent based adhesive, suitable for effective operating temperatures of between -16°C and 78°C. The adhesive is applied either by way of a roller or suitable spray system, to achieve a range of 9 to 25 grams/m².

- 5 The first and second layers are each produced separately in a continuous strip form and are secured together at step 26, whereby the adhesive applied to the second layer at step 25 is removably attached to the release coating of the first layer, applied at step 22. The "burst strength" of the combined layers was found to be in the order of 20 to 28 kg/mm².
- 10 At step 27, a printing process is applied to form printed information, artwork or the like for display at the first major surface, facing outwardly of the bottle to which the label is attached to.

Simultaneously, a printing process 28 is applied to provide the artwork to the sticker 9 whilst 15 also rendering an eye mark on the second layer, followed by application of a slip varnish which is applied over the artwork at step 29. A clear polypropylene protective laminate may then be applied at step 30 on the outward facing side of the first layer.

The combined layers are then passed under an electronic eye at step 31 which detects the eye 20 mark and actuates a rotary cutter at 32 to score a line in the second layer which defines the removable portion of the label. A second electronic eye 33 activates another rotary cutter at 34 to separate the strip of combined layers into individual labels which are then passed about a vacuum roller (not shown) for application of aggressive adhesive and attachment to a respective bottle.

25

A more detailed example of the appearance of the second major surface 3 of a label 1, constructed in the above manner is shown in Figure 5a. The label may be of any suitable dimensions. As an example, the label may be adapted to fit to a conventional 600ml bottle produced by, for example, Coca-Cola and has an overall length dimension "L" of 235mm and 30 a height dimension "H" in the order of 45mm. The removable sticker portion 8 may have a length "l" in the order of 175mm in order to provide 30mm long scanning regions 35 at either

end of the label, to allow for reliable detection of an eye mark 36, which facilitates actuation of the rotary cutters at steps 32 and 34.

Referring now to the diagrammatic exploded cross section of Figure 5b, the depth dimension 5 "D" of the first layer 5, including print 37 and release coating 38 is in the range of about 12 micron to 36 micron. The second layer 7, including print 39 and adhesive 40, has a depth dimension "d" in the range of about 23 micron to 40 micron. This compares favourably with a conventional bottle label which has an overall depth dimension in the range 40 to 46 microns, allowing for addition of the clear polypropylene overlaminates 41, in the order of 12 10 micron.

As may be appreciated, the relative density and strength of the polyester created allows the overall thickness of the label 1 to be minimised so as to be comparable to that of a conventional label. The relative density of the polyester also provides an advantage that the 15 polypropylene of the second layer 7 may be readily scored without cutting through the first layer. This is illustrated diagrammatically in Figure 6 where a region 42 of the polyester layer 5 resists a force generated by a cutting action, indicated by arrow 43, which serves to cut through the relatively soft polypropylene to produce a score 44 in the second layer 7. Such a score is represented by line 44 in Figure 5a, for defining the removable portion 8. As 20 such, the second layer may be readily scored by the rotary cutter at step 32, as represented in Figure 4, without severing or perforating the label as a whole. Accordingly, the label may still reliably be fed through a conventional bottling installation.

In addition to the above label composition, it may also be necessary to apply the slip varnish 25 45 to reduce the co-efficient of friction (C.O.F.) of the label to that available with conventional labels, in order that the label 1 runs smoothly through a labelling installation. More specifically, at present, bottle labels may be impregnated with "dust" on a rear surface, at a mill stage so that whilst travelling along the path of a labeller, at certain points, the material slips into predetermined positions, such as during application to a bottle. In 30 particular, after individual labels are cut using electronic eye technology the individual labels are applied to a vacuum drum and allowed to "slip" around the vacuum drum until a bottle

travels past.

The degree of slip is critical to allow correct timing for application of the labels and is determined by the C.O.F. of the label.

5

The label of the present invention does not have the "dust" impregnated in the second major surface, as this would interfere with application of the print 39. Accordingly, the label needs an additional slip varnish 45 to provide C.O.F. characteristics similar to a convention label.

10

A suitable varnish was formed utilizing the following components:

- Labelstar 2540 Varnish 11132144 is a slip varnish (C.O.F.) Modified Starpac AS3 Varnish 11006151. This was achieved by an addition of 1.2% of polefin wax to Starpac AS3 Varnish 11006151.
- 15 - Synthetic Silicone alternate. 0.1%
- Glassene Silicone alternate 0.99%
- Plasticiser Agent 0.5%
- Polyester Waxing Agent 1.23% \pm 0.3%
- Emulsifier 2.0% \pm 0.6%

20

The overall C.O.F. of the slip varnish may be varied by modifying the combinations of both natural waxes and synthetic silicones so that a minimum range of 0.25 C.O.F. and a maximum range of 0.40 may both be achieved, as required.

25 Figure 7 illustrates an alternative label construction. The label 50 is formed in a generally similar manner to the label 1 and like parts are denoted with like reference numerals. In particular, the label 50 includes first and second layers 5,7 with a respective release coating 38 and adhesive 40, and slip varnish 45. The layers 5,7 are, however, formed of transparent material 51,52 preferably clear polyester and polypropylene, respectively. Instead of having 30 a single layer of print 39, formed on the second layer 7, a plurality of overlaid print layers 53, 54 and 55 are instead formed on one side 56 of the second layer 7. The print layers

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comprise a first layer 53 printed directly onto the material 52 as a 'reverse' image for display toward the first major surface of the label, a masking layer 54 and a final layer 55 forming a second image facing outwardly of the second major surface of the label. Each of the print layers 53,55 may of course in turn comprise a number of different ink layers required to form 5 each of the images.

Such an arrangement of print layers simplifies the production process of Figure 4 to some extent since all of the printing procedures may be effected from one side only of the label and the need for a protective overlaminant 41, applied at step 30, may be dispensed with.

10

It is, however, a further possibility that the print layers 53,54,55 may be used in combination with a printed or opaque polyester layer 5 such that the image of print layer 53 may be obscured prior to removal of the portion 8. For that purpose, the polyester layer may perhaps be metallized. Such an arrangement may have application to a competition or a game where 15 an image associated with a prize or the like needs to initially be hidden. Otherwise, the release strength factor between the first layer and removable portion 8, the relative density of the layers, to allow for appropriate scoring, and the coefficient of friction characteristics are the same as for the label 1.

20 The invention has been described by way of non-limiting example only, and many modifications or variations may be made thereto without departing from the spirit or the scope of the composite label as described.

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CLAIMS:

1. A composite label including a first layer of printed polyester for displaying information at a first major surface of the label and a second layer including material having a density less than the polyester for presenting information at a second major surface of the label, the second layer including a removable portion arranged to be separated from the label and secured to another object.
2. A composite label as claimed in claim 1, wherein the material of the second layer comprises polypropylene.
3. A composite label as claimed in claim 1 or 2, wherein the second layer includes an adhesive on one side thereof for securing the removable portion to the first layer and the first layer includes a release coating to facilitate removal of the portion therefrom, the adhesive and release coating providing a release strength factor between 17 grams force/50mm and 30 grams force/50mm.
4. A composite label including a first layer for displaying information at a first major surface of the label and a second layer including a removable portion arranged to be separated from the label and secured to another object, wherein the second layer includes an adhesive on one side thereof for securing the removable portion to the first layer and the first layer includes a release coating to facilitate removal of the portion therefrom, the adhesive and release coating providing a release strength factor of between 17 grams force/50mm and 30 grams force/50mm.
5. A composite label as claimed in claim 4, wherein the first layer is formed of polyester and the second layer includes material having a density less than the polyester.
6. A composite label as claimed in claim 4, wherein the second layer is printed with information for display to both sides thereof.

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7. A composite label as claimed in claim 6, wherein the first layer is transparent such that the information printed on the second layer is viewable from the first major surface of the label.

5 8. A composite label as claimed in claim 6, wherein the second layer includes a transparent material with a plurality of overlaid print layers applied thereto comprising a first image printed on the transparent material, for display toward the first major surface, a masking layer and a second image facing outwardly of the second major surface.

10 9. A composite label as claimed in claim 8, wherein the transparent material of the second layer is clear polypropylene.

10. A composite label as claimed in claim 1 or 4, wherein a clear polypropylene laminate is applied on the first major surface.

15 11. A composite label as claimed in claim 1 or 4, wherein a varnish is applied to the second major surface to provide the second major surface with a coefficient of friction in the range of about 0.25 to 0.40.

20 12. A composite label as claimed in claim 1 or 5, wherein the polyester is white.

13. A composite label as claimed in claim 1 or 5, wherein the polyester is metallized.

14. A composite label as claimed in claim 1 or 4, wherein a depth dimension of the first 25 layer is in the range of about 12 micron to 30 micron.

15. A composite label as claimed in claim 14, wherein the second layer has a depth dimension in the range of about 23 micron to 40 micron.

30 16. A composite label as claimed in claim 1 or 4, wherein the second layer includes a mark for detection by an electronic eye to facilitate actuation of a cutting device, for scoring

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the second layer so as to define the removable portion.

17. A composite label as claimed in claim 16, wherein the portion is in the form of a sticker.

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18. A composite label as claimed in claim 16, for use with a bottle, the label including an aggressive adhesive applied to the second major surface in a region adjacent the removable portion, to facilitate secure attachment of the label to the bottle.

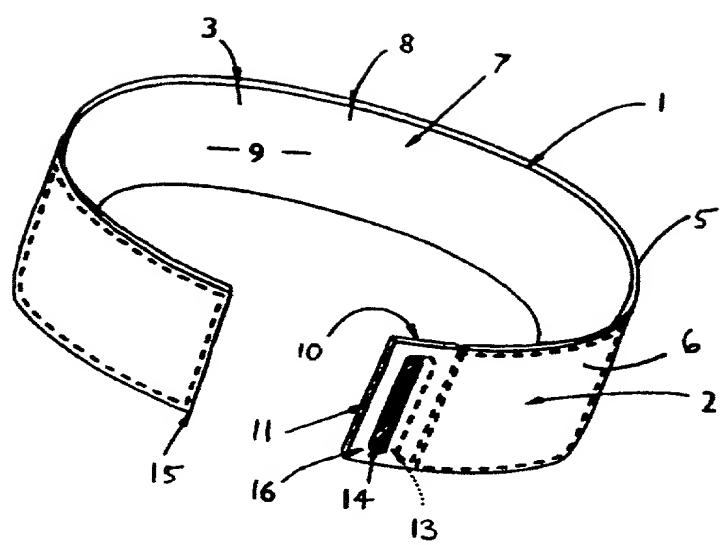


FIG 1

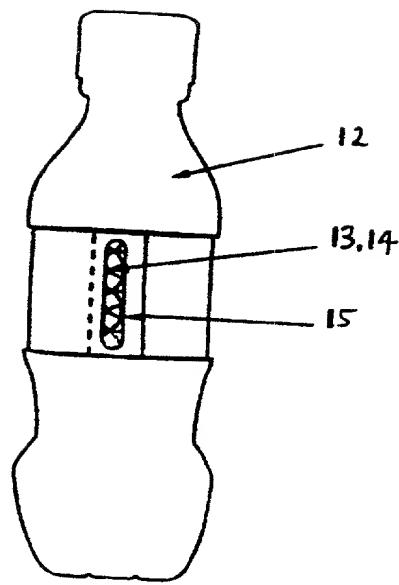


FIG 2

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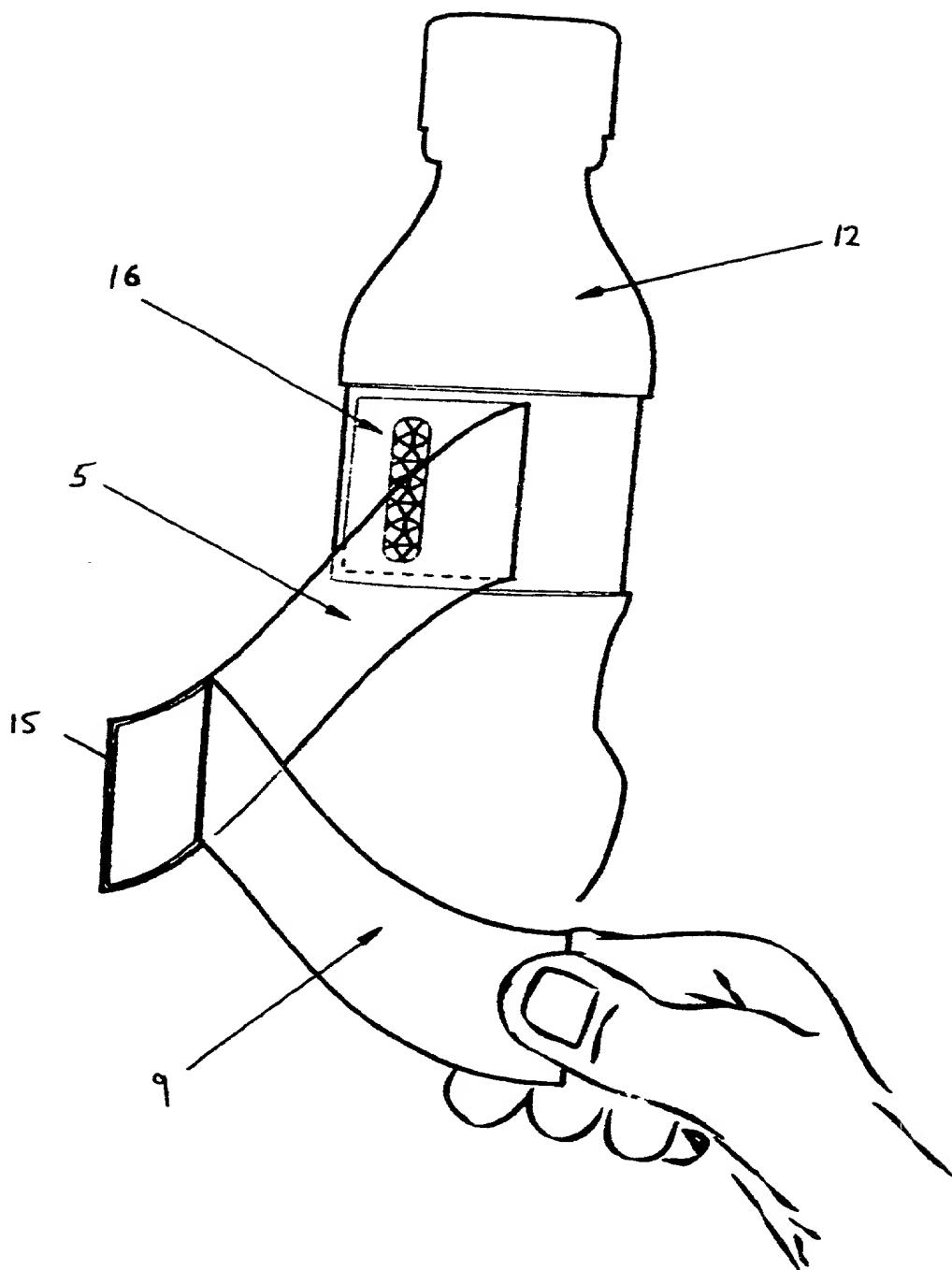


FIG 3

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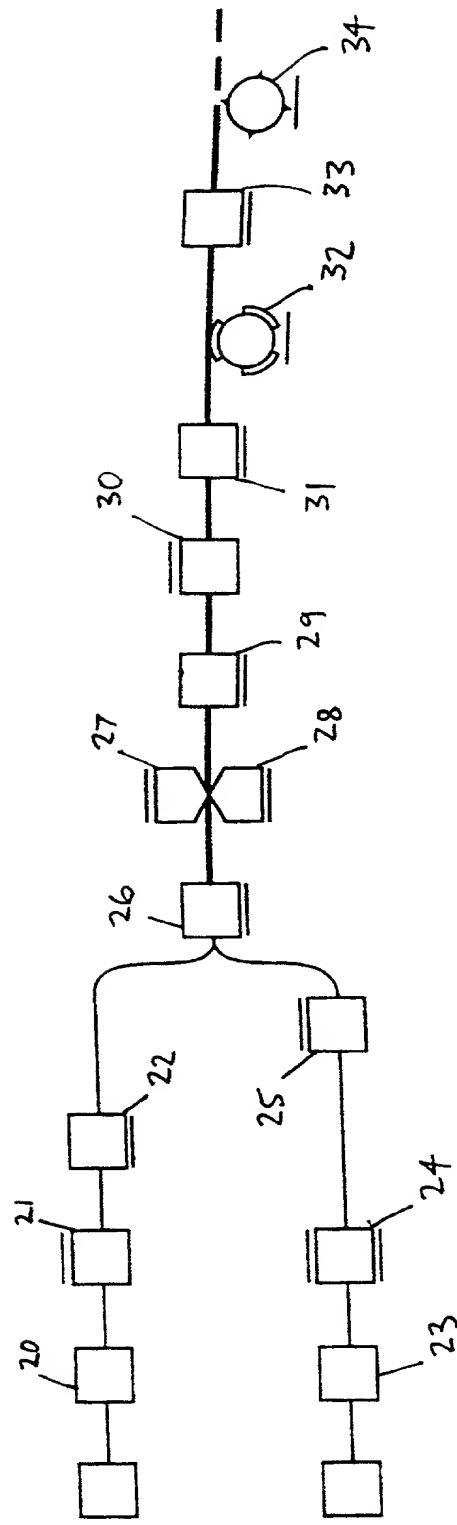


FIG 4

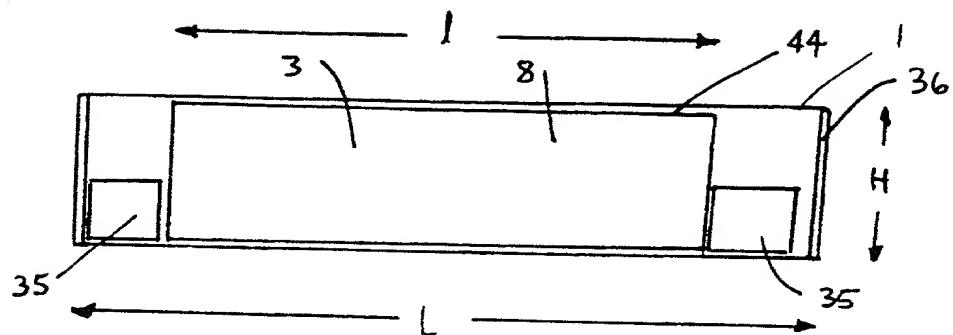


FIG 5a

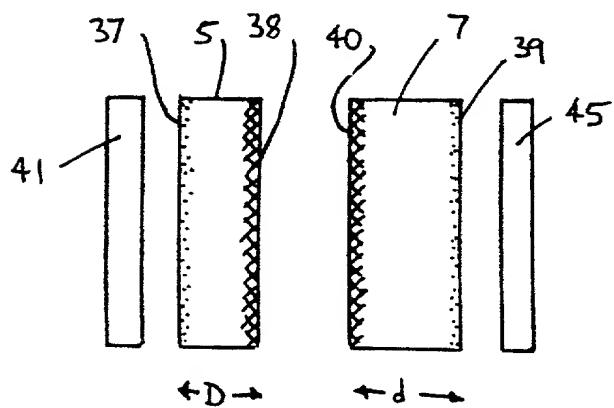


FIG 5b

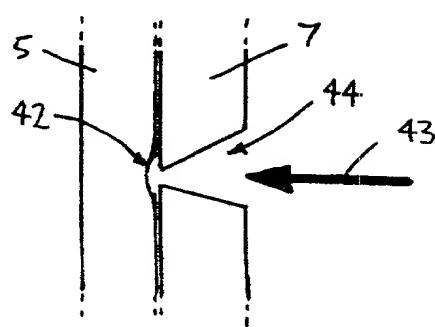


FIG 6

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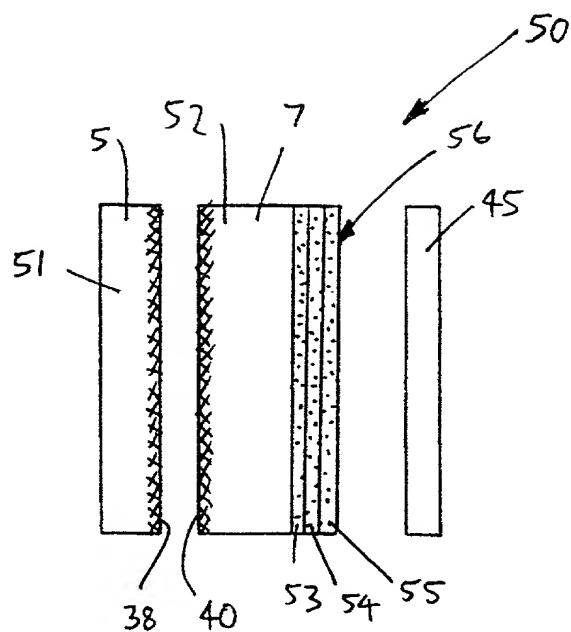


FIG 7

COMBINED DECLARATION
AND POWER OF ATTORNEY

(Original, Design, National Stage of PCT, Divisional, Continuation or C-I-P Application)

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name; I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

This declaration is of the following type:

- original
- design
- national stage of PCT.
- divisional
- continuation
- continuation-in-part (C-I-P)

the specification of which: (*complete (a), (b), or (c)*)

(a) is attached hereto.

(b) was filed on _____ as Application Serial No. _____ and was amended on _____ (*if applicable*).

(c) was described and claimed in PCT International Application No. * filed * on * and was amended on *(if applicable)*
* PCT/AU99/00681 * 24 August 1999

Acknowledgement of Review of Papers and Duty of Candor

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the patentability of the subject matter claimed in this application in accordance with Title 37, Code of Federal Regulations § 1.56.

In compliance with this duty there is attached an information disclosure statement. 37 CFR 1.98.

Priority Claim

I hereby claim foreign priority benefits under Title 35, United States Code, § 119(a)-(d) of any foreign application(s) for patent or inventor's certificate or of any PCT International Application(s) designating at least one country other than the United States of America listed below and have also identified below any foreign application(s) for patent or inventor's certificate or any PCT International Application(s) designating at least one country other than the United States of America filed by me on the same subject matter having a filing date before that of the application on which priority is claimed

(complete (d) or (e))

(d) no such applications have been filed.

(e) such applications have been filed as follows:

PRIOR FOREIGN/PCT APPLICATION(S) FILED WITHIN 12 MONTHS (6 MONTHS FOR DESIGN) PRIOR TO SAID APPLICATION				
COUNTRY	APPLICATION NO.	DATE OF FILING (day, month, year)	DATE OF ISSUE (day, month, year)	PRIORITY CLAIMED UNDER 35 USC 119
Australia	PP6135/98	24 September 1998		<input checked="" type="checkbox"/> YES NO <input type="checkbox"/>
Australia	42420/99	2 August 1999		<input checked="" type="checkbox"/> YES NO <input type="checkbox"/>
				<input type="checkbox"/> YES NO <input type="checkbox"/>
ALL FOREIGN APPLICATION(S), IF ANY, FILED MORE THAN 12 MONTHS (6 MONTHS FOR DESIGN) PRIOR TO SAID APPLICATION				
				<input type="checkbox"/> YES NO <input type="checkbox"/>
				<input type="checkbox"/> YES NO <input type="checkbox"/>
				<input type="checkbox"/> YES NO <input type="checkbox"/>

Claim for Benefit of Prior U.S. Provisional Application(s)

I hereby claim the benefit under Title 35, United States Code, § 119(e) of any United States provisional application(s) listed below:

Provisional Application Number	Filing Date

Claim for Benefit of Earlier U.S./PCT Application(s) under 35 U.S.C. 120

(complete this part only if this is a divisional, continuation or C-I-P application)

I hereby claim the benefit under Title 35, United States Code, § 120 of any United States application(s) or PCT international application(s) designating the United States of America that is/are listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior application(s) in the manner provided by the first paragraph of Title 35, United States Code § 112, I acknowledge the duty to disclose information as defined in Title 37, Code of Federal Regulations, § 1.56 which occurred between the filing date of the prior application(s) and the national or PCT international filing date of this application:

(Application Serial No.) (Filing Date) (Status) (patented, pending, abandoned)

(Application Serial No.) (Filing Date) (Status) (patented, pending, abandoned)

Power of Attorney

As a named inventor, I hereby appoint Dana M. Raymond, Reg. No. 18,540; Frederick C. Carver, Reg. No. 17,021; Francis J. Hone, Reg. No. 18,662; Joseph D. Garon, Reg. No. 20,420; Arthur S. Tenser, Reg. No. 18,839; Ronald B. Hildreth, Reg. No. 19,498; Thomas R. Nesbitt, Jr., Reg. No. 22,075; Robert Neuner, Reg. No. 24,316; Richard G. Berkley, Reg. No. 25,465; Richard S. Clark, Reg. No. 26,154; Bradley B. Geist, Reg. No. 27,551; James J. Maune, Reg. No. 26,946; John D. Murnane, Reg. No. 29,836; Henry Tang, Reg. No. 29,705; Robert C. Scheinfeld, Reg. No. 31,300; John A. Fogarty, Jr., Reg. No. 22,348; Louis S. Sorell, Reg. No. 32,439; Rochelle K. Seide Reg. No. 32,300; Gary M. Butter, Reg. No. 33,841; Marta E. Delsignore, Reg. No. 32,689; and Lisa B. Kole, Reg. No. 35,225 of the firm of BAKER BOTTS L.L.P., with offices at 30 Rockefeller Plaza, New York, New York 10112, as attorneys to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith

SEND CORRESPONDENCE TO: BAKER BOTTS L.L.P. 30 ROCKEFELLER PLAZA, NEW YORK, N.Y. 10112 CUSTOMER NUMBER: 21003	DIRECT TELEPHONE CALLS TO: BAKER BOTTS L.L.P. (212) 705-5000
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I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge

that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

FULL NAME OF SOLE OR FIRST INVENTOR	LAST NAME <u>SCOTT</u>	FIRST NAME <u>Leonard</u>	MIDDLE NAME <u>James</u>	
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DATE	SIGNATURE OF INVENTOR <u>21.12.2000</u>			
FULL NAME OF SECOND JOINT INVENTOR, IF ANY	LAST NAME	FIRST NAME	MIDDLE NAME	
RESIDENCE & CITIZENSHIP	CITY	STATE or FOREIGN COUNTRY	COUNTRY OF CITIZENSHIP	
POST OFFICE ADDRESS	POST OFFICE ADDRESS	CITY	STATE or COUNTRY	ZIP CODE
DATE	SIGNATURE OF INVENTOR			
FULL NAME OF THIRD JOINT INVENTOR, IF ANY	LAST NAME	FIRST NAME	MIDDLE NAME	
RESIDENCE & CITIZENSHIP	CITY	STATE or FOREIGN COUNTRY	COUNTRY OF CITIZENSHIP	
POST OFFICE ADDRESS	POST OFFICE ADDRESS	CITY	STATE or COUNTRY	ZIP CODE
DATE	SIGNATURE OF INVENTOR			
FULL NAME OF FOURTH JOINT INVENTOR, IF ANY	LAST NAME	FIRST NAME	MIDDLE NAME	
RESIDENCE & CITIZENSHIP	CITY	STATE or FOREIGN COUNTRY	COUNTRY OF CITIZENSHIP	
POST OFFICE ADDRESS	POST OFFICE ADDRESS	CITY	STATE or COUNTRY	ZIP CODE
DATE	SIGNATURE OF INVENTOR			
FULL NAME OF FIFTH JOINT INVENTOR, IF ANY	LAST NAME	FIRST NAME	MIDDLE NAME	
RESIDENCE & CITIZENSHIP	CITY	STATE or FOREIGN COUNTRY	COUNTRY OF CITIZENSHIP	
POST OFFICE ADDRESS	POST OFFICE ADDRESS	CITY	STATE or COUNTRY	ZIP CODE
DATE	SIGNATURE OF INVENTOR			
FULL NAME OF SIXTH JOINT INVENTOR, IF ANY	LAST NAME	FIRST NAME	MIDDLE NAME	
RESIDENCE & CITIZENSHIP	CITY	STATE or FOREIGN COUNTRY	COUNTRY OF CITIZENSHIP	
POST OFFICE ADDRESS	POST OFFICE ADDRESS	CITY	STATE or COUNTRY	ZIP CODE
DATE	SIGNATURE OF INVENTOR			